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PATENT & TRADEMARK OFFICE

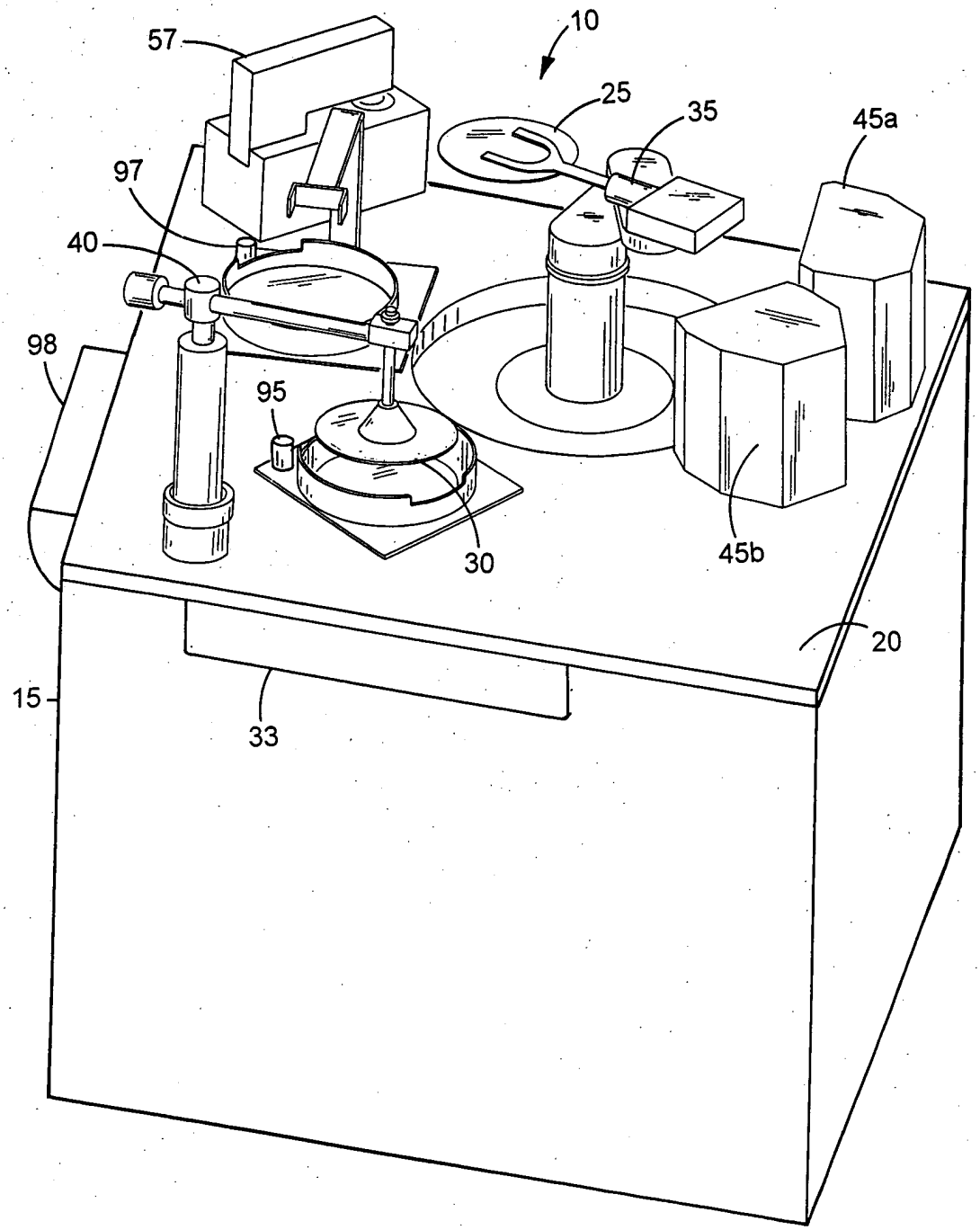

FIG. 1

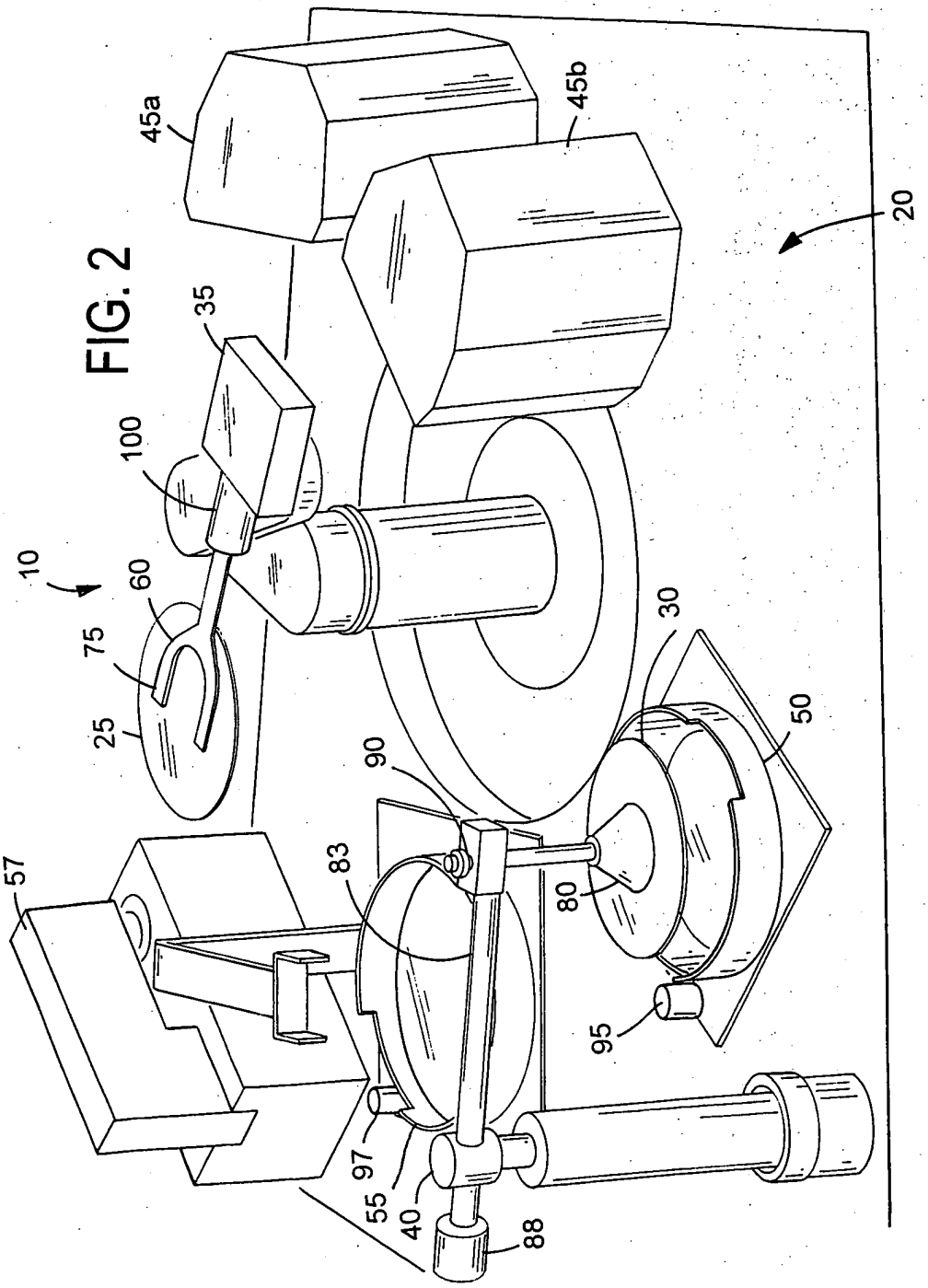

FIG. 2

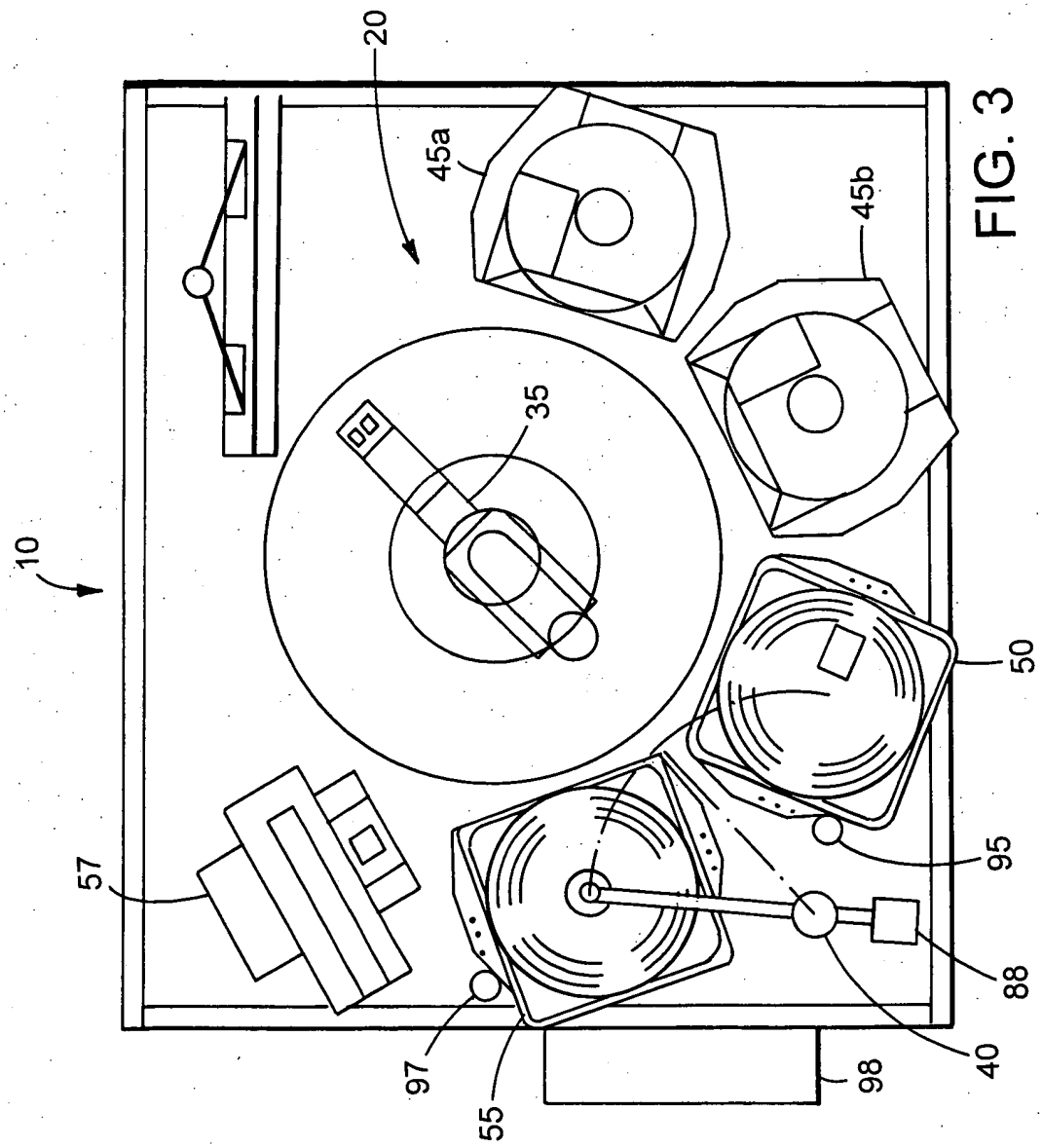

FIG. 3

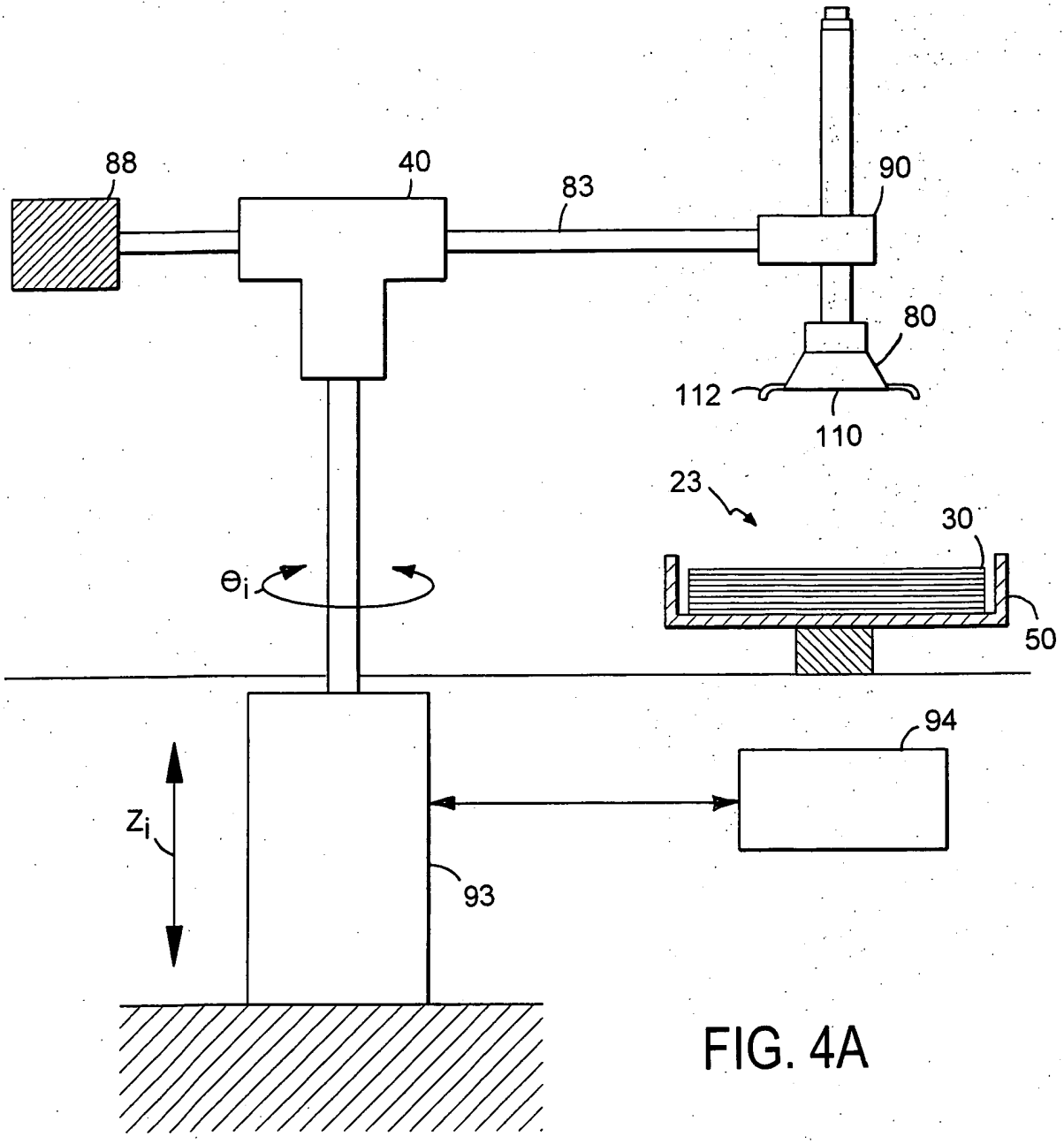

FIG. 4A

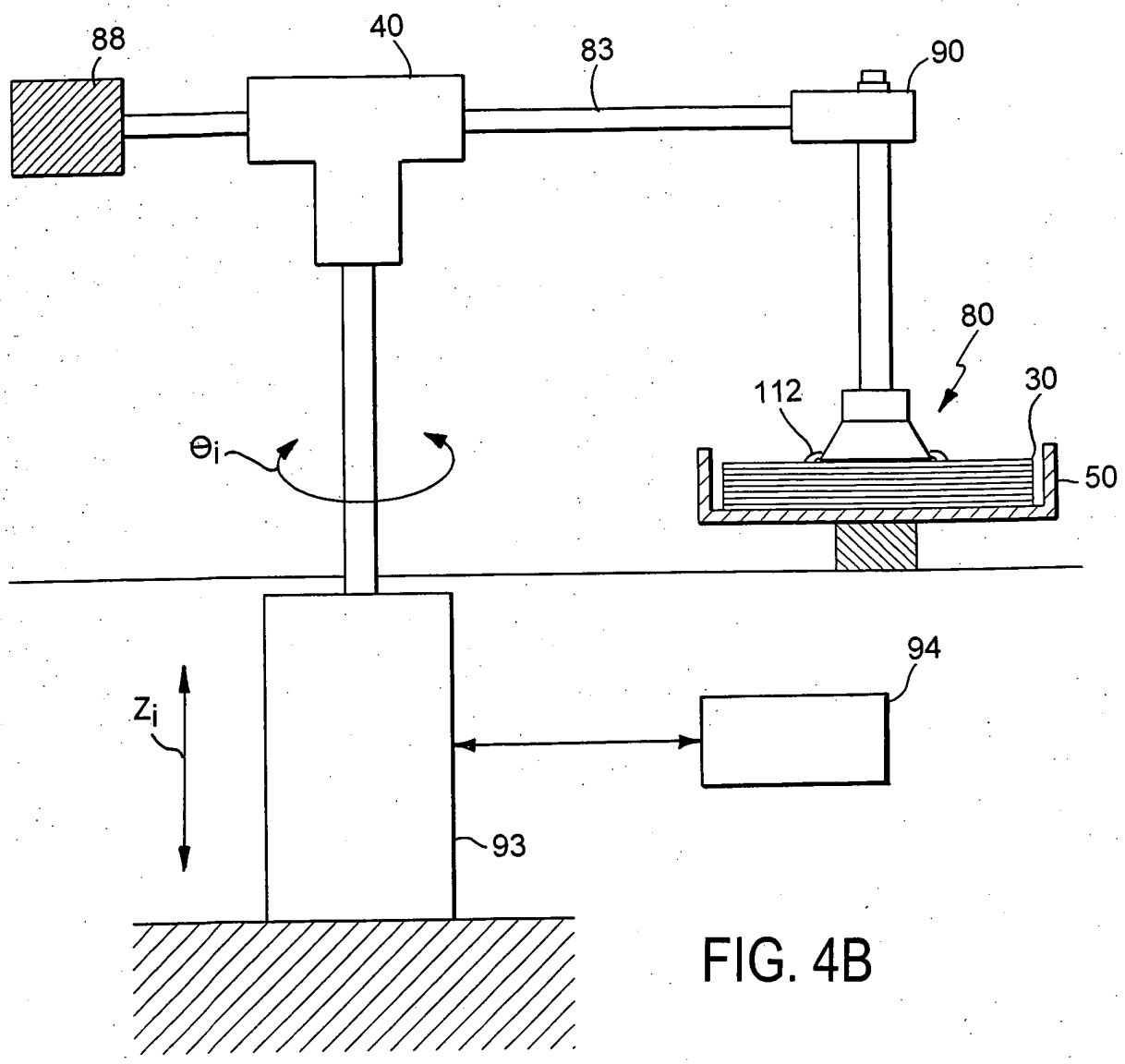

FIG. 4B

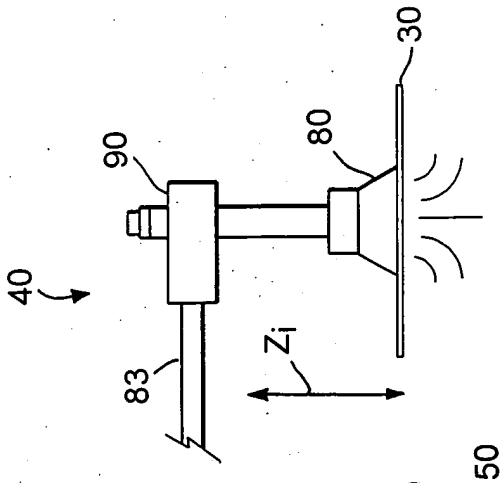

FIG. 5C

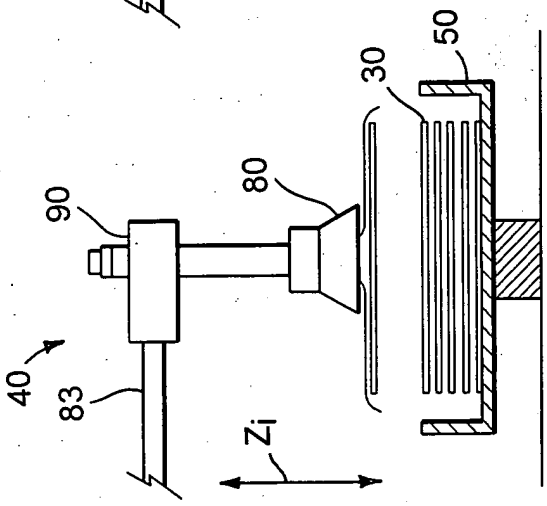

FIG. 5B

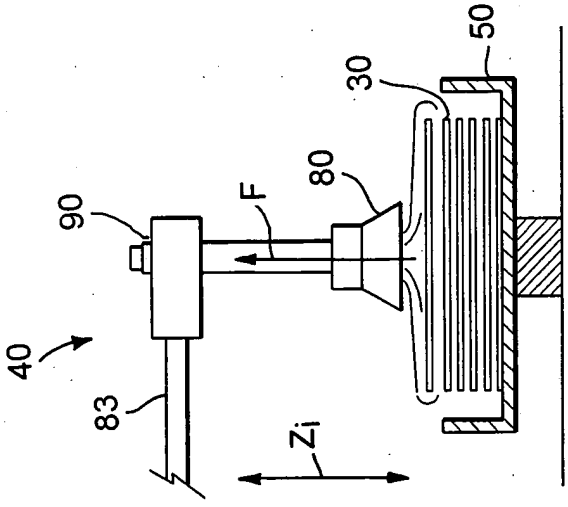

FIG. 5A

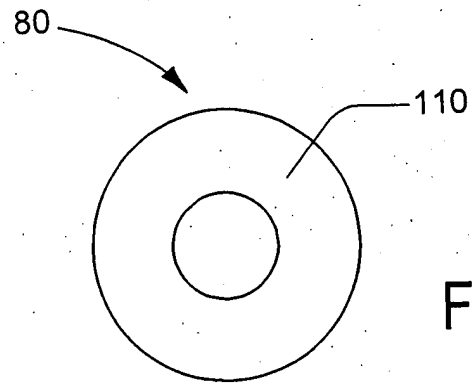

FIG. 6A

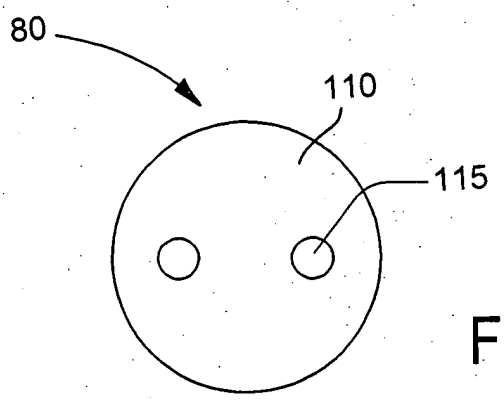

FIG. 6B

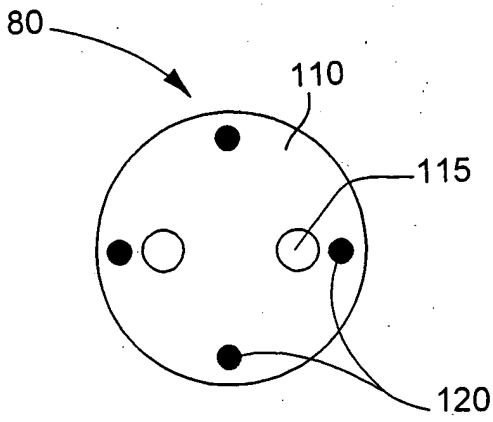

FIG. 6C

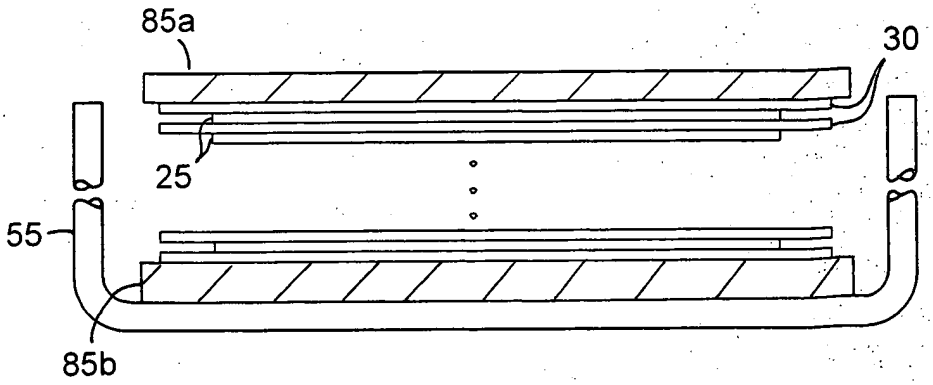

FIG. 7A

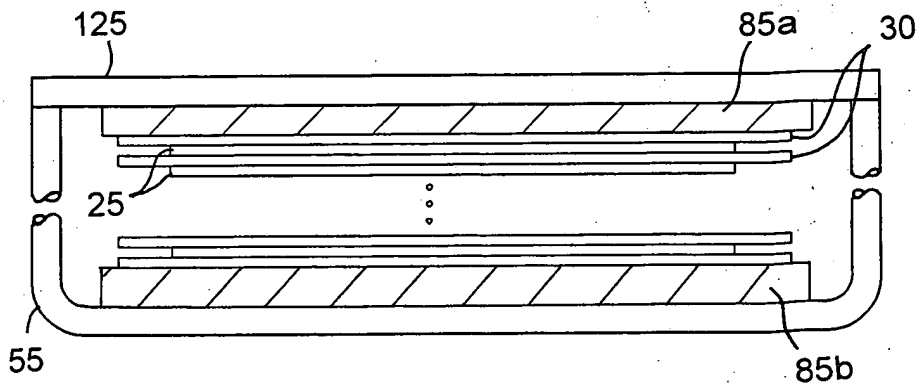

FIG. 7B

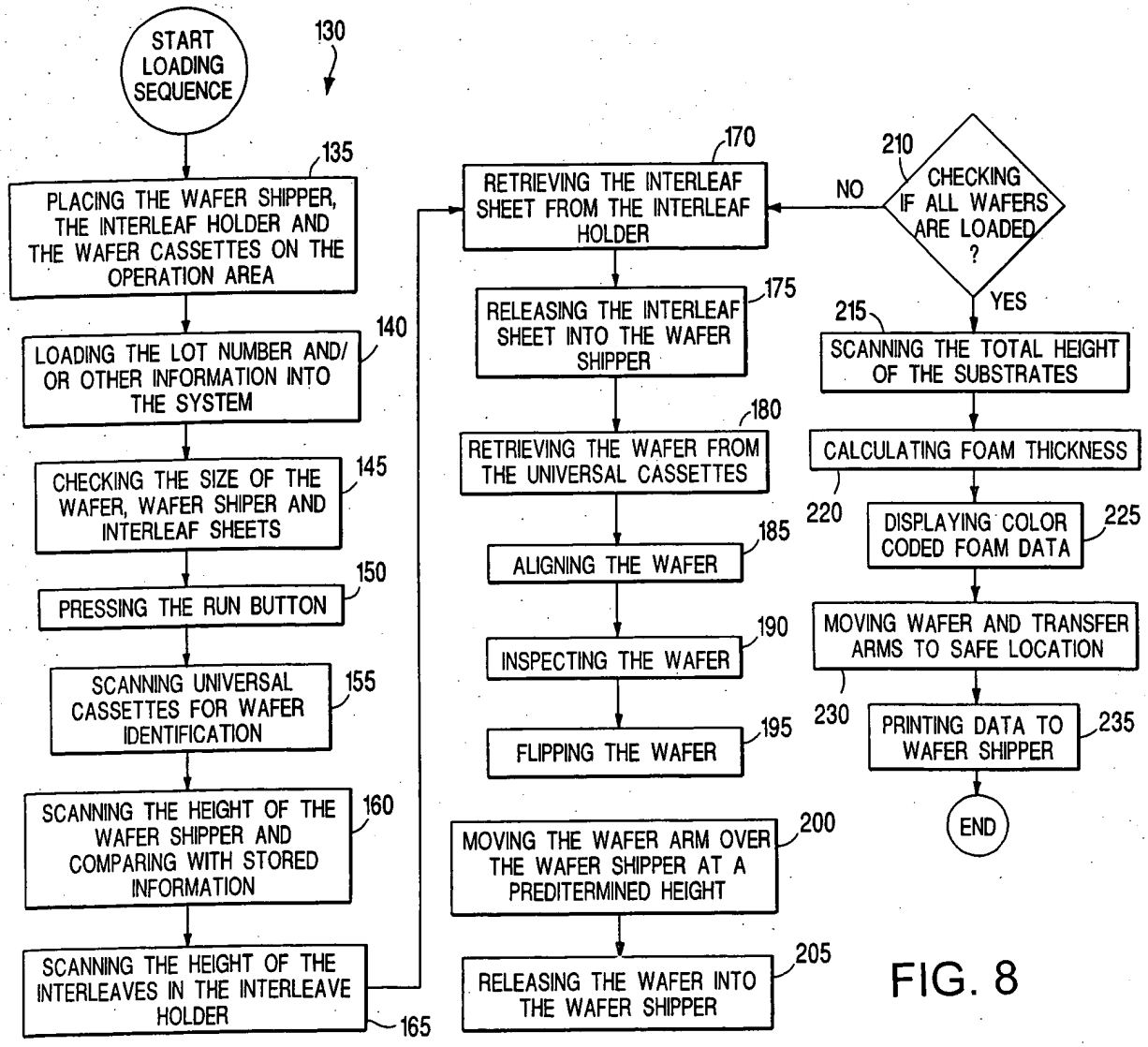
START LOADING SEQUENCE
130
PLACING THE WAFER SHIPPER, THE INTERLEAF HOLDER AND THE WAFER CASSETTES ON THE OPERATION AREA
135
LOADING THE LOT NUMBER AND/ OR OTHER INFORMATION INTO THE SYSTEM
140
CHECKING THE SIZE OF THE WAFER, WAFER SHIPER AND INTERLEAF SHEETS
145
PRESSING THE RUN BUTTON
150
SCANNING UNIVERSAL CASSETTES FOR WAFER IDENTIFICATION
155
SCANNING THE HEIGHT OF THE WAFER SHIPPER AND COMPARING WITH STORED INFORMATION
160
SCANNING THE HEIGHT OF THE INTERLEAVES IN THE INTERLEAVE HOLDER
165
RETRIEVING THE INTERLEAF SHEET FROM THE INTERLEAF HOLDER
170
RELEASING THE INTERLEAF SHEET INTO THE WAFER SHIPPER
175
RETRIEVING THE WAFER FROM THE UNIVERSAL CASSETTES
180
ALIGNING THE WAFER
185
INSPECTING THE WAFER
190
FLIPPING THE WAFER
195
MOVING THE WAFER ARM OVER THE WAFER SHIPPER AT A PREDITERMINED HEIGHT
200
RELEASING THE WAFER INTO THE WAFER SHIPPER
205
CHECKING IF ALL WAFERS ARE LOADED ?
210
NO
YES
SCANNING THE TOTAL HEIGHT OF THE SUBSTRATES
215
CALCULATING FOAM THICKNESS
220
DISPLAYING COLOR CODED FOAM DATA
225
MOVING WAFER AND TRANSFER ARMS TO SAFE LOCATION
230
PRINTING DATA TO WAFER SHIPPER
235
END

FIG. 8